

**REGULATIONS**  
**FOR THE TOWN OF DUNSTABLE**  
**GENERAL WETLANDS BYLAW**

Promulgated by the Dunstable Conservation Commission  
Town Hall, Main Street, Dunstable  
Massachusetts 01827

Effective May 1, 1986

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### 1.01: Introduction and Purpose

**(2) Activities Subject to Regulation Under the Bylaw**

(a) Activities Within the Areas Subject to Protection Under the Bylaw

Any activity proposed or undertaken within an area specified in Section 1.02 (1) above which will remove, fill, dredge or alter that area is subject to regulation under the Bylaw and requires the filing of a Notice of Intent.

(b) Activities Within the Buffer Zone

Any activity proposed or undertaken within 100 feet of an area specified in Section 1.02 (1) (a) above (hereinafter called the Buffer Zone) which, in the judgment of the Commission, will alter an Area Subject to Protection Under the Bylaw is subject to regulation under the Bylaw and requires the filing of a Notice of Intent.

(c) Activities Outside the Area Subject to Protection Under the Bylaw and the Buffer Zone

Any activity proposed or undertaken outside the areas specified in Section 1.02(1) above and outside the Buffer Zone is not subject to regulation under the Bylaw and does not require the filing of a Notice of Intent unless and until that activity actually alters an Area Subject to Protection Under the Bylaw.

In the event that the Commission determines that such activity has in fact altered an Area Subject to Protection Under the Bylaw, it shall impose such conditions on the activity or any portion thereof as it deems necessary to contribute to the protection of the interests identified in the Bylaw.

**1.03: General Provisions for Burden of Proof, and Presumptions of Significance**

**(1) Burden of Proof**

- (a) Any person who files a Notice of Intent to perform any work within an Area Subject to Protection Under the Bylaw or within the Buffer Zone has the burden of demonstrating to the Commission (1) that the area is not significant to the protection of any of the interests identified in the Bylaw, or (2) that the proposed work will contribute to the protection of the interests identified in the Bylaw complying with the general performance standards established by these regulations of that area.
- (b) Any person who requests the Commission to regulate work taking place outside an Area Subject to Protection Under the Bylaw and outside the Buffer Zone has the burden of demonstrating to the satisfaction of the Commission that the work has in fact altered an Area Subject To Protection Under the Bylaw.

**(2) Presumptions of Significance**

Each Area Subject to Protection Under the Bylaw is presumed to be significant to one or more of the interests identified in the Bylaw. These presumptions are rebuttable and are set forth in Part II of these regulations.

## 1.04: Definitions

Activity means any form of draining, dumping, dredging, damming, discharging, excavating, filling or grading, the erection, reconstruction or expansion of any buildings or structures, the driving of pilings, the construction or improvement of roads and other ways, the changing of runoff characteristics, the intercepting or diverging of ground or surface water, the installation of drainage, sewage and water systems, the discharging of pollutants, the destruction of plant life, and any other changing of the physical characteristics of land.

Aesthetics means characteristics and conditions of the land where spying through the eyes of beholders perceptions of beauty, or naturalness, or harmony, or any combination of these. While admittedly not open to precise measurement or definition, it is specifically to include the visual impact of works of man, and the preservation of harmonious blending of natural and man-made objects within a field of view without regard to the location of the viewer with respect to the man-made objects.

### Agriculture

- (a) Land in Agricultural Use means land presently and primarily used in the raising of animals including, but not limited to, dairy cattle, beef cattle, poultry, sheep, swine, horses, ponies, mules, goats, bees and fur-bearing animals, or land presently and primarily used in a related manner which is incidental thereto and represents a customary and necessary use in raising such animals.

Additionally, Land in Agricultural Use means land presently and primarily used in the raising of fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, tobacco, flowers, sod, trees, nursery or greenhouse products, and ornamental plants and shrubs; or land presently and primarily used in raising forest products under the planned program to improve the quantity and quality of a continuous crop; or land presently and primarily used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products.

Land in Agricultural Use may lie fallow for a period of time if it has been used for agriculture for at least three of the five preceding years.

- (b) Normal maintenance or improvement of Land in Agricultural Use means the following activities:
1. All tilling and harvesting practices customarily employed to enhance existing growing conditions;
  2. the pasturing of animals, including the construction and maintenance of such fences as may be required;
  3. the use of fertilizers, pesticides, herbicides and other such materials, subject to all state and federal laws and regulations governing their use;
  4. the constructing, grading or restoring of field ditches, subsurface drains, grass waterways, projects to improve drainage, prevent erosion, provide more effective use of rainfall and improve equipment operation and efficiency, all in order to improve conditions for growing of existing crops or raising of animals;
  5. the cutting and removal of trees for the purpose of selling said trees or any products derived therefrom, when carried out in the following manner:
    - a. every reasonable effort shall be made to avoid or minimize access through Areas Subject to Protection Under the Bylaw
    - b. where access through Areas Subject to Protection Under the Bylaw is necessary, every reasonable effort shall be made to gain said access without constructing new

- accessways including, but not limited to, maintaining and improving (but not substantially enlarging) existing accesses, and operations shall be conducted when the soil is frozen, dry or otherwise stable;
  - c. where access is determined impracticable without constructing new accessways, said accessways shall be designed, constructed and maintained in accordance with U.S. Forest Service logging road standards, and shall be removed and the site returned to previously existing conditions within one (1) year;
  - d. all channel crossings shall be stabilized to prevent erosion, using standard U.S. Forest Service methods. When crossings involve fill or other closed or semi-closed structures which will obstruct flow, they shall be designed, constructed and maintained in accordance with U.S. Forest Service standards, shall allow the unobstructed passage of existing flows for at least the 10-year storm, and shall be removed and the site returned to existing conditions within one year of construction;
  - e. all soils which are exposed during and after work shall be stabilized to prevent said soils from eroding into open water bodies, in accordance with standard U.S. Forest Service methods;
  - f. all operations shall be conducted in accordance with a cutting plan approved by the Massachusetts Department of Environmental Management District Forester; and
  - g. a written notice describing the proposed cutting and removal of trees shall be submitted to the Commission not less than ten days prior to the commencement of operations.
6. the selective cutting of trees by owners for their own use, when carried out in the following manner:
- a. no more than 25,000 board feet or 50 cords shall be harvested;
  - b. after the cutting, the crown area of the remaining trees shall be evenly distributed throughout the site and shall cover no less than 50 percent of the surface area of the site;
  - c. the removal of the selectively cut trees shall occur only during those periods when the ground is sufficiently frozen, dry or otherwise stable to support the equipment used;
  - d. the cutting, removal or other destruction of trees and understory vegetation shall not occur within 25 feet of the bank of a water body;
  - e. the placement of slash, branches and limbs resulting from the cutting and removal operations shall not occur within 25 feet of the bank of a water body; and
  - f. there shall occur no filling, excavation or other change in the existing topography.

Alter means to change the conditions of any Area Subject to Protection Under the Bylaw. Example of alteration include, but are not limited to, the following:

- a. the changing of pre-existing drainage characteristics, flushing characteristics, sedimentation patterns, flow patterns and flood retention areas;
- b. the lowering of the water level or water table;
- c. the destruction of vegetation;
- d. the changing of water temperature, biochemical oxygen demand (BOD), and other physical, biological or chemical characteristics of the receiving water;
- e. the changing of the suitability of the site for supporting wildlife;
- f. the changing of the appearance of the land.

Applicant means any person who files a Notice of Intent, or on whose behalf such a notice is filed.

Area Subject to Protection Under the Bylaw means any area specified in Section 1.02(1). It is used synonymously with Resource Area, each one of which is defined in greater detail in Part II.

Bank is defined in Part II, Section 1.33.

Beach a naturally occurring beach means an unvegetated bank as defined in Part II, Section 1.33.

Best Available Measures means the most up-to-date technology or the best design, measures or engineering practices that have been developed and that are commercially available.

Best Practical Measures means technologies, designs, measures or engineering practices that are in general use to protect similar interests.

Bordering means touching. An area listed in Section 1.02 (1)(a) is bordering on a water body listed in that section if some portion of the area is touching the water body or if some portion of the area is touching another area listed in that section, some portion of which in turn is touching the water body.

Bordering Vegetated Wetland is defined in Part II Section 1.34.

Boundary means the boundary of an Area Subject to Protection Under the Bylaw. A description of the boundary of each area is found in the appropriate section of these regulations.

Buffer Zone means that area of land extending 100 feet horizontally outward from the boundary of any area specified in Section 1.02(1)(a).

Bylaw means the Town of Dunstable General Wetlands Bylaw.

Certificate of Compliance means a written determination by the Commission that work or a portion thereof has been completed in accordance with an Order. It shall be made on Form 8 of Section 1.99.

Commission means the Dunstable Conservation Commission.

Conditions means those requirements set forth in a written Order issued by the Commission for the purpose of permitting, regulating or prohibiting any activity that removes, fills, dredges or alters an Area Subject to Protection Under the Bylaw. (See also Section 1.05 (6))

Creek means the same as a stream.

Date of Issuance means the date an Order is mailed, as evidenced by a postmark, or the date it is hand delivered.

Date of Receipt means the date of delivery to an office, home or usual place of business by mail or hand delivery.

Determination

- (a) A Determination of Applicability means a written finding by the Commission as to whether a site or the work proposed thereon is subject to the jurisdiction of the Bylaw. It shall be made on Form 2 of Section 1.99.
- (b) A Determination of Significance means a written finding by the Commission, after a public hearing, that the area on which the proposed work is to be done, or which the proposed work will alter, is significant to one or more of the interests identified in the Bylaw. It shall be made as part of the Order on Form 5 of Section 1.99.
- (c) A Notification of Non-Significance means a written finding by the Commission, after a public hearing, that the area on which the proposed work is to be done, or which the proposed work will alter, is not significant to any of the interests of the Bylaw. It shall be made on Form 6 of Section 1.99.

Dredge means to deepen, widen or excavate, either temporarily or permanently.

Extension Permit means a written extension of the time within which the authorized work shall be completed. It shall be made on Form 7 of Section 1.99.



Fill means to deposit any material so as to raise an elevation, either temporarily or permanently.

Flood Control means the prevention or reduction of flooding and flood damage.

Freshwater Wetlands are defined in Paragraph 7 of the Wetlands Protection Act. M.G.L. c. 131, s. 40.

General Performance Standards means those requirements established by these Regulations for activities in or affecting each of the Areas Subject to Protection Under the Bylaw. They are found in Part II of these Regulations, paragraphs 1.33 through 1.35.

Ground Water Supply means water below the earth's surface in the zone of saturation.

Interests Identified in the Bylaw means public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish, protection of fisheries, protection of wildlife, and protection of aesthetics.

Lake means any open body of fresh water with a surface area of ten (10) acres or more, and shall include great ponds.

Land Containing Shellfish means land under fresh water when any such land contains freshwater shellfish.

Land Subject to Flooding is defined in Part II of these Regulations, paragraph 1.36(2).

Land Under Water Bodies and Waterways means the bottom of, or land under, the surface of any creek, river, stream, pond, or lake. Land under water bodies is further defined in Part II of these Regulations, paragraph 1.35(2).

Majority means more than half of the members of the Conservation Commission then in office.

Marsh is defined in paragraph 10 of the Wetlands Protection Act, M.G.L. c. 131, s. 40.

Notice of Intent means the written notice filed by any person intending to remove, fill, dredge or alter an Area Subject to Protection Under the Bylaw. It shall be made on Form 3 or 4 of Section 1.99.

Order means an Order of Conditions.

Order of Conditions means the document issued by the Commission containing conditions which regulate or prohibit an activity. It shall be made on Form 5 of Section 1.99.

Owner of Land Abutting the Activity means the owner of land sharing a common boundary or corner with the site of the proposed activity in any direction, including land located directly across a street, way, creek, river, stream, brook or canal.

Party to any proceeding before the Commission means the applicant, the Commission, and pursuant to paragraph 1.05(7)(a) of these regulations may include the owner of the site, any abutter, any ten (10) residents of Dunstable.

Plans means any such data, maps, engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the Commission to describe the site and/or the work; to determine the applicability of the Bylaw or to determine the impact of the proposed work upon the interests identified in the Bylaw.

Pond means any open body of fresh water, either naturally occurring or man-made by impoundment, with a surface area observed or recorded within the last ten (10) years of at least 10,000 square feet, and which is

never without standing water due to natural causes, except during periods of extended drought. For purposes of this definition, extended drought shall mean any period of four (4) or more months during which the average rainfall for each month is 50 percent or less of the ten (10) year average for that same month. Basins or lagoons which are part of wastewater treatment plans shall not be considered ponds, nor shall swimming pools or other impervious man-made retention basins.

Prevention of Pollution means the prevention or reduction of contamination of surface or ground water.

Private Water Supply means any source or volume of surface or ground water demonstrated to be in any private use or demonstrated to have a potential for private use.

Protection of Fisheries means protection of the capacity of an Area Subject to Protection Under the Bylaw;

- (a) to prevent or reduce contamination or damage to fish; and
- (b) to serve as their habitat and nutrient source. Fish includes all species of fresh water finfish and shellfish.

Public Water Supply means any source or volume of surface or ground water demonstrated to be in public use or approved for water supply pursuant to M.G.L. c.111, s. 160 by the Division of Water Supply of the Department of Environmental Quality Engineering, or demonstrated to have a potential for public use.

Remove means to take away any type of material, thereby changing an elevation, either temporarily or permanently.

Request for Determination of Applicability means a written request made by any person to the Commission for a determination as to whether a site or work thereon is subject to the Bylaw. It shall be submitted on Form 1 of Section 1.99.

Resource Area means any of the areas specified in Part I of these Regulations in Section 1.02 (1).

River means a natural flowing body of water that empties to any lake or other river and which flows throughout the year.

Shellfish means any species of freshwater mollusk.

Significant means plays a role. A resource area is significant to an interest identified in the Bylaw when it plays a role in the provision or protection, as appropriate, of that interest.

Storm Damage Prevention means the prevention of damage caused by water from storms, including, but not limited to, erosion and sedimentation, damage to vegetation, property or buildings or damage caused by flooding, water-borne debris or water-borne ice.

Stream means a body of running water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient, and which flows within, into or out of an Area Subject to Protection Under the Bylaw. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year (i.e., which is intermittent) is a stream so long as it receives discharge from groundwater for periods of time such that it may be observed to flow during times when there is not surface water discharge occurring.

Swamp is defined in Paragraph 9 of the Wetlands Protection Act.

Wetlands Protection Act means M.G.L. c.131, s. 40.

Wildlife means all species of animals otherwise than domesticated of any of the several classes indigenous to the Town for any period of time throughout the year.

Work means the same as activity.

## **1.05: Procedures**

### **(1) Time Periods**

All time periods of ten days or less specified in the Bylaw and these Regulations shall be computed using business days only. In the case of a Determination or Order, such period shall commence on the first day after the date of issuance and shall end at the close of business on the tenth business day thereafter. All other time periods specified in the Bylaw and these Regulations shall be computed on the basis of calendar days, unless the last day falls on a Saturday, Sunday or legal holiday, in which case the last day shall be the next business day following.

### **(2) Actions by the Conservation Commission**

Where the Bylaw states that a particular action (except receipt of a request or notice) is to be taken by the Commission, that action is to be taken by more than half of the members present at a meeting of at least a quorum. A quorum is defined as a majority of the members then in office.

Where the Bylaw states that an order or notification shall be signed by a majority of the Commission, that action is to be taken by a majority of the members then in office, who need not convene as a body in order to sign, provided they meet pursuant to the open meeting law, M.G.L. c. 39, s. 23A-23C, when voted on the matter.

Where the Bylaw states that the Conservation Commission is to receive a request or notice, Conservation Commission means a member or the Conservation Commission or an individual designated by the Conservation Commission to receive such request or notice.

### **(3) Determinations of Applicability**

#### **(a) Requests for Determination of Applicability**

1. Any person who desires a determination as to whether the Bylaw applies to land, or to work that may affect an Area Subject to Protection Under the Bylaw, may submit to the Commission by certified mail or hand delivery a Request for a Determination of Applicability, Form 1 of Section 1.99.
2. Any person who proposes to perform work within the Buffer Zone shall submit to the Commission either a Notice of Intent for such work or a Request for a Determination of Applicability. Said request shall include sufficient information, as required on Form 1, to enable the Commission to find and view the area and to determine whether the proposed work will alter an Area Subject to Protection under the Bylaw.
3. A Request for a Determination of Applicability shall include certification that the owner of the area subject to the request, if the person making the request is not the owner, has been notified that a determination is being requested under the Bylaw.

#### **(b) Determination of Applicability**

1. Within 21 days after the date of receipt of the Request for a Determination of Applicability, the Commission shall issue a Determination of Applicability, Form 2 of Section 1.99. Notice of the time and place of the public meeting at which the determination will be made shall be given by the commission at the expense of the person making the request not less than five days prior to such meeting, by publication in a newspaper of general circulation in Dunstable, and by mailing a notice to the person

making the request, the owner, the Board of Health and the Planning Board. Notice shall also be given in accordance with the open meeting law, M.G.L. c. 39 s. 23B. Said determination shall be signed by a majority of the Commission, and copies thereof shall be sent to the person making the request, and to the owner. Said determination shall be valid for three years from the date of issuance.

2. The Commission shall find that the Bylaw applies to the land, or a portion thereof, if it is an Area Subject to Protection Under the Bylaw as defined in Section 1.02(1) above. The Commission shall find that the Bylaw applies to the work, or portion thereof, if it is an Activity Subject to Regulation Under the Bylaw as defined in Section 1.02 (2) above.
3. A Notice of Intent which is filed as a result of a positive determination, shall be filed with the Commission, and all of the procedures set forth in Section 1.05(4) shall apply.

#### **(4) Notices of Intent**

- (a) Any person who proposes to do work that will remove, fill, dredge or alter any Area Subject to Protection Under the Bylaw shall submit a Notice of Intent on Form 3 of Section 1.99 and other application materials in accordance with the submittal requirements set forth in the General Instructions provided in Section 1.99.
- (b) For certain projects, applicants may at their option use the Abbreviated Notice of Intent, Form 4 of Section 1.99. This latter form may only be used when both of the following circumstances exist:
  1. the proposed work is within the Buffer Zone, as defined in Section 1.04 of this part, or within Land Subject to Flooding, as defined in Part II, Section 1.36 (2);
  2. the proposed work will disturb less than 1000 square feet of surface area within the Buffer Zone and/or Land Subject to Flooding.
- (c) Upon receipt of the application materials, the Commission shall have a file number assigned to the materials. The file number may be one assigned by the DEQE in those cases where material was filed with them under the Wetlands Protection Act regulations, or may be generated by the Commission where no filing was made under the State regulations. The designation of a file number shall not imply that the plans and supporting documents have been judged adequate for the issuance of an Order, but only that copies of the minimum submittal requirements contained in the General Instructions have been filed.
- (d) In the event that only a portion of a proposed project or activity lies within an Area Subject to Protection Under the Bylaw, or within the Buffer Zone, and the remainder of the project or activity lies outside those areas, only that portion within those areas and such contiguous areas of alteration hydraulically up-gradient, and therefore subject to generation of runoff into an Area Subject to Protection Under the Bylaw or the Buffer Zone must be described in the detail called for by the General Instructions and Forms 3 and 4; provided, however, that in such circumstances the Notice of Intent shall also contain a description and calculations of peak flow and estimated water quality characteristics of discharge from a point source (both closed and open channel) when the point of discharge falls within an Area Subject to Protection Under the Bylaw or within the Buffer Zone.

Notwithstanding the foregoing, when the Commission has determined that an activity outside the Area Subject to Protection Under the Bylaw and outside the Buffer Zone has in fact altered an Area Subject to Protection under the Bylaw, it may require such plans, supporting calculations and other documentation as are necessary to describe the entire activity.

- (e) The requirements under the Bylaw to obtain or apply for all obtainable permits, variances and approvals required by local bylaw with respect to the proposed activity shall mean only those which are feasible to obtain at the time the Notice of Intent is filed. Permits, variances, and

approvals required by local bylaw may include, among others, zoning variances, permits from boards of appeals, permits required under floodplain or wetland zoning bylaws and gravel removal permits. They do not include, among others, building permits under the state building code G.L. Chapter 23B, section 16, or subdivision control approvals under the State Subdivision Control Law, G.L. Chapter 41, sections 81K-88GG which are issued by local authorities. When an applicant for a comprehensive permit (under G.L. c. 40B, sections 20-23) from the Board of Appeals has received a determination from the board granting or denying the permit and, in the case of a denial, has appealed to the Housing Appeals Committee (established under G.L. c. 23B, section 5A), said applicant shall be deemed to have applied for all permits obtainable at the time of filing.

- (f) If the Commission rejects a Notice of Intent because of a failure to obtain or apply for all permits, variances and approvals required by local bylaw, it shall specify in writing the permit, variance or approval that has not been applied for. A ruling by the municipal agency within whose jurisdiction the issuance of the permit, variance or approval lies, or by the town counsel concerning the applicability or obtainability of such permit, variance or approval shall be accepted by the Commission. In the absence of such a ruling, other evidence may be accepted.

#### **(5) Public Hearing by the Commission**

- (a) A public hearing shall be held by the Commission within 21 days of receipt of the minimum submittal requirements set forth in the General Instructions and shall be advertised in accordance with the Bylaw and the requirements of the open meeting law, G.L. c. 39, section 23B.
- (b) Public hearings may be continued as follows:
  - 1. without the consent of the applicant to a date, announced at the hearing, within 21 days of receipt of the Notice of Intent.
  - 2. with the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing; or
  - 3. with the consent of the applicant for a period not to exceed 21 days after the submission of a specified piece of information or the occurrence of a specified action. The date, time and place of said continued hearing shall be publicized in accordance with the Bylaw, and notice shall be sent to any person at the hearing who so requests in writing.

**(6) Orders of Conditions Regulating the Work**

- (a) Within 21 days of the close of the public hearing the Commission shall either;
  - 1. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is not significant to any of the interests identified in the Bylaw, and shall so notify the applicant on Form 6 of Section 1.99, or
  - 2. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is significant to one or more of the interests identified in the Bylaw, and shall issue an Order of Conditions for the protection of said interest(s), on Form 5 of Section 1.99.

The standards and presumptions to be used by the Commission in determining whether an area is significant to the interests identified in the Bylaw are found in Part II of these regulations.

- (b) The Order of Conditions shall impose such conditions as are necessary to meet the performance standards set forth in Part II of these regulations for the protection of those areas found to be significant to one or more of the interests identified in the Bylaw. The Order shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards.

The Order shall impose conditions only upon work or the portion thereof that is to be undertaken within the Area Subject to Protection Under the Bylaw or within the Buffer Zone. The Order shall impose conditions setting limits on the quantity and quality of discharge from a point source (both closed and open channel), when said limits are necessary to protect the interests identified in the Bylaw; provided, however, that the point of discharge falls within an Area Subject to Protection Under the Bylaw or within the Buffer Zone.

Notwithstanding the foregoing, when the Commission has determined that an activity outside the Areas Subject to Protection Under the Bylaw and outside the Buffer Zone has in fact altered an Area Subject to Protection Under the Bylaw, it shall impose such conditions on any portion of the activity as are necessary to contribute to the protection of the interests identified in the Bylaw.

- (c) If the Commission finds that the information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in the Bylaw, it may issue an order prohibiting the work. The Order shall specify the information which is lacking and why it is necessary.
- (d) An Order shall be valid for three years from the date of its issuance, provided, however, that the Commission may issue an Order for up to five years where special circumstances are set forth in the Order.
- (e) The Order shall be signed by a majority of the Commission and shall be mailed or hand delivered to the applicant or his agent or attorney.
- (f) A copy of the plans and other materials submitted to the Commission describing the work and the Order shall be kept on file by the Commission and shall be available to the public at reasonable hours.

- (g) Prior to the commencement of any work permitted or required by the Order, the Order shall be recorded in the Registry of Deeds for Northern Middlesex County or the Land Court, within the chain of title of the affected property. In the case of recorded land, the Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. Certification of recording shall be sent to the Commission on the form at the end of Form 5. If work is undertaken without the applicant first recording the Order, the Commission may issue an Enforcement Order (Form 9, Section 1.99) or may itself record the Order of Conditions.

**(7) Extension of Orders of Conditions**

- (a) The Commission may extend an Order for one or more periods of up to three years each, which shall be made on Form 7 of Section 1.99. The request for an extension shall be made to the Commission at least thirty days prior to the expiration of the Order.
- (b) The Commission may deny the request for an extension and require the filing of a new Notice of Intent for the remaining work in the following circumstances:
  - 1. where no work has begun on the project, except where such failure is due to an unavoidable delay in the obtaining of other necessary permits;
  - 2. where new information, not available at the time the Order was issued, has become available and indicates that the Order is not adequate to protect the interests identified in the Bylaw;
  - 3. where incomplete work is causing damage to the interests identified in the Bylaw; or
  - 4. where work has been done in violation of the Order of these regulations.
- (c) The Extension Permit shall be signed by a majority of the Commission. A copy of the Extension Permit shall be kept on file by the Commission and shall be available to the public at reasonable hours.
- (d) The Extension Permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of the recording shall be sent to the Commission on the form at the end of Form 7. If the work is undertaken without the applicant so recording the Extension Permit, the Commission may issue an Enforcement Order (Form 9, Section 1.99.) or may itself record the Extension Permit.

**(8) Certificates of Compliance**

- (a) Upon written request by the applicant, a Certificate of Compliance shall be issued by the Commission within 21 days of receipt thereof, and shall certify on Form 8 of Section 1.99, that the activity or portions thereof described in the Notice of Intent and plans has been completed in compliance with the Order. The Certificate of Compliance shall be signed by a majority of the Commission.
- (b) Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by the Commission in the presence of the applicant or the applicant's agent.
- (c) If the Commission determines, after review and inspection, that the work has not been done in compliance with the Order, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued within 21 days of receipt of a request for a Certificate of Compliance, shall be in writing and shall specify the reasons for denial.
- (d) If a project has been completed in accordance with plans stamped by a registered professional engineer, land surveyor, landscape architect or architect, a signed and dated written statement

by such a professional person certifying substantial compliance with the plans, and setting forth what deviation, if any, exists from the plans approved in the Order shall accompany the request for a Certificate of Compliance.

- (e) If the Order contains conditions which continue past the completion of the work, such as maintenance or monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate shall also specify to what portions of the work it applies, if it does not apply to all the work regulated by the Order.
- (f) The Certificate of Compliance shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of the recording shall be sent to the Commission on the form at the end of Form 8. Upon failure of the applicant to so record, the Commission may do so.

### **1.06: Emergencies**

- (1) Any person requesting permission to do an emergency project shall specify why the project is necessary for the protection of the health or safety of the citizens of the Commonwealth and what agency of the Commonwealth or subdivision thereof is to perform the project or has ordered the project to be performed. If the project is certified to be an emergency by the Commission, the certification shall include a description of the work which is to be allowed and shall not include work beyond that necessary to abate the emergency. A site inspection shall be made prior to certification.
- (2) An emergency certification shall be issued only for the protection of public health or safety.
- (3) An emergency certification shall only be issued under the authority of the Bylaw if it is simultaneously being issued according to the terms and conditions set forth in the Wetlands Protection Act Regulations (M.G.L. c. 131, s. 40)

### **1.07: Enforcement Orders**

- (1) When the Commission determines that an activity is in violation of the Bylaw, these regulations or a final Order, the Commission may issue an Enforcement Order on Form 9 of Section 1.99. Violations include, but are not limited to:
  - (a) failure to comply with a final order, such as failure to observe a particular condition or time period specified in the Order;
  - (b) failure to complete work described in a Final Order, when such failure causes damage to the interests identified in the Bylaw; or
  - (c) failure to obtain a valid Final Order or Extension Permit prior to conducting any Activity Subject to Regulation Under the Bylaw as defined in Section 1.02(2).
- (2) The members, officers, employees and agents of the Commission may enter upon privately owned land for the purpose of performing their duties under the Bylaw and these regulations.
- (3) An Enforcement Order issued by the Commission shall be signed by a majority of the Commission. In a situation requiring immediate action, an Enforcement Order may be signed by a single member or agent of the Commission, if said Order is ratified by a majority of the members at the next scheduled meeting of the Commission.

### **1.08: Severability**



If any provision of any part of the regulations, or the application thereof, is held to be invalid, such invalidity shall not affect any other provision of the regulations.

### **1.08: *Effective Date***

The regulations contained in Part I and Part II shall take effect on May 1, 1986 and shall apply to all Notices of Intent filed on or after that date and any subsequent procedures related to such filing made on or after that date, Parts I and II of these regulations shall not apply to Any Notice of Intent filed prior to the effective date of these regulations, or to any extensions of any Order of Conditions the Notice of Intent for which was filed prior to said effective date.

## **PART II      ADDITIONAL REGULATIONS FOR DUNSTABLE WETLANDS**

### **1.30: *Introduction***

The Regulations contained in this Part apply to all work which will remove, fill, dredge or alter any bank, bordering vegetated wetland, land under water bodies and waterways or land subject to flooding. These regulations pertain to all wetlands within Dunstable, and are promulgated in addition to those regulations set forth in Part I.

The regulations continued in this Part are grouped into four resource areas. Each section begins with a Preamble which specifies the interests identified in the Bylaw to which that resource area is or is likely to be significant. The next subsection defines the resource area and describes the characteristics of that area which are critical to the protection of the interests so identified. The next subsection sets forth the presumptions concerning the significance of the resource area. The last subsection contains the general performance standards to be applied to any work that will remove, fill, dredge or alter the resource area.

### **1.31: *Purpose***

The regulations contained in this Part are intended to establish criteria and standards for the uniform and coordinated administration of the provisions of the Bylaw. They are intended to ensure that development in and near wetlands within the Town of Dunstable is sited, designed, constructed and maintained in a manner that protects the public interest identified in the Bylaw and served by these resource areas.

These regulations are intended to notify both persons proposing work in Areas Subject to Protection Under the Bylaw and those regulating that work as to the performance standards that should be applied. These standards are intended to identify the level of protection that the Commission must impose in order to contribute to the protection of the interests identified in the Bylaw. It is the responsibility of the person proposing work to design and complete his project in conformance with these performance standards. It is the responsibility of the Commission to impose such conditions on a proposed project as to ensure that the project is designed and completed in a manner consistent with these standards.

### **1.32: General Provisions for Part II**

- (1) If the Commission determines that a resource area is significant to an interest identified in the Bylaw for which no presumption is stated in the Preamble to the applicable section, the Commission shall impose such conditions as are necessary to contribute to the protection of such interest.
- (2) When the site of a proposed project is subject to a Restriction Order which has been duly recorded under the provisions of M.G.L. c. 131, s. 40A, such a project shall conform to both the provisions contained in that Order and to these regulations.
- (3) Notwithstanding the provisions of Section 1.31 through 1.36 below, the Commission may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in the Bylaw permitting the following limited projects or activities:
  - (a) Work on land to be used primarily and directly in the raising of animals, including but not limited to dairy cattle, beef cattle, poultry, sheep, swine, horses, ponies, mules, goats, bees and fur-bearing animals or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such animals; and work on land to be used primarily and directly in the raising of fruits, vegetables, berries, nuts and tobacco, flowers, sod, trees, nursery or greenhouse products, and ornamental plants and shrubs or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided they are carried out in accordance with the following general conditions and any additional conditions deemed necessary by the Commission.
    1. There shall occur no change in the existing topography or the existing soil and surface water levels of the area;
    2. all fertilizers, pesticides, herbicides and other such materials shall be used in accordance with all applicable state and federal laws and regulations governing their use;
    3. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soil conservation Service, "Guidelines for Soil and Water Conservation." A plan prepared by the U.S.D.A. Soil Conservation Service through the Middlesex County Conservation District for the improvement of land for agriculture shall be deemed adequate to prevent erosion and siltation; and
    4. all land converted to agricultural use, or improved for greater agricultural productivity, if subject to regulation under the Bylaw at the time of filing a Notice of Intent, shall be considered to be but temporarily altered for agricultural purposes and so shall retain the wetlands designation it had at the time the Notice was prepared, and should the agricultural use cease, become abandoned or be proposed to be put to other uses, all such lands no matter how so temporarily altered shall be subject to regulation under the Bylaw according to the designation it had prior to being temporarily altered for agricultural use.
  - (b) Work on land to be used primarily and directly in the raising of cranberries or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided it is carried out in accordance with the following general conditions and any additional conditions deemed necessary by the Commission:
    1. all fertilizers, pesticides, herbicides and other such materials shall be used in accordance with all applicable state and federal laws and regulations governing their use, and
    2. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soils Conservation Service, "Guidelines for Soil and Water Conservation."

- (c) 3:16:55 PM Work on land to be used primarily and directly in the raising of forest products under a planned program to improve the quantity and quality of a continuous crop or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided it is carried out in accordance with the following general conditions and any additional conditions deemed necessary by the Commission:
1. there shall occur no change in the existing topography or the existing soil and surface water levels of the area except for temporary access roads;
  2. the removal of trees shall occur only during those periods when the ground is sufficiently frozen, dry or otherwise stable to support the equipment used;
  3. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soil Conservation Service, "Guidelines for Soil and Water Conservation;" and
  4. the placement of slash, branches and limbs resulting from the cutting and removal operations shall not occur within twenty-five (25) feet of the bank of a water body.
- (d) The construction, reconstruction, operation and maintenance of underground and overhead public utilities, such as electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, may be permitted, in accordance with the following general conditions and any additional conditions deemed necessary by the Commission:
1. the Commission may require a reasonable alternative route with fewer adverse effects for a local distribution or connecting line not reviewed by the Energy Facilities Siting council;
  2. best available measures shall be used to minimize adverse effects during construction;
  3. the surface vegetation and contours of the area shall be substantially restored; and
  4. all sewer lines shall be constructed to minimize inflow and leakage.
- (e) The subdivision of land into two or more lots under one or more ownership where such subdivision shall increase the number of lots in Dunstable having a front lot area undevelopable except by securing authorization from the Commission to significantly alter any Area Subject to Protection Under the Bylaw, may be permitted, in accordance with the following general conditions and any additional conditions deemed necessary by the Commission:
1. the subdivision of land into two or more lots shall not result in the creation of lots with wetlands-limited utility or development potential by reason of there being created continuous wetlands frontage between the public way and the useable upland area, except
  2. when easements or other means are provided for driveway or roadway access of minimum legal and practical width acceptable to the Planning Board are concurrently established and recorded for each new lot along alignments which do not cause a significant increase in the area of alteration of an Area Subject to Protection Under the Bylaw beyond what would have been required if the original lot had been developed as one undivided lot.
- (f) Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders and correcting substandard intersections.
- (g) The excavation of wildlife impoundments, farm ponds, and ponds for fire protection. The above uses are allowed provided that no fill or other material is placed upon the wetland except as may be necessary to construct said impoundments or ponds, to provide access thereto, and to provide bank stabilization.
- (h) The maintenance of beaches and boat launching ramps which existed on the effective date of these regulations.

- (i) The maintenance, repair and improvement (but not substantial enlargement) of structures, including buildings, piers, towers and headwalls, which existed on the effective date of these regulations.
  - (j) The construction and maintenance of catwalks, footbridges, wharves, docks, piers, boathouses, boat shelters, duck blinds, skeet and trap shooting decks and observation decks; provided, however, that such structures are constructed on pilings or posts so as to permit the reasonable unobstructed flowage of water and adequate light to maintain vegetation.
  - (k) The routine maintenance and repair of road drainage structures including culverts and catch basins, drainage easements, ditches, watercourses and artificial water conveyances to insure flow capacities which existed on the effective date of these regulations.
- (4) Notwithstanding the provisions of Sections 1.33 through 1.36 below, the Commission may issue an Order of Conditions for projects which will improve the natural capacity of a resource area(s) to protect the interests identified in the Bylaw. Such projects include, but are not limited to, the removal of aquatic nuisance vegetation to retard pond and lake eutrophication and the thinning or planting of vegetation to improve habitat value.
- (5) Notwithstanding the provisions of Sections 1.33 through 1.36 below, the Commission may issue an Order of Conditions to regulate runoff from projects which significantly alter runoff quality or quantity into a resource area from upland areas not otherwise subject to regulation under the Bylaw.

### **1.33: Bank (Naturally Occurring Banks and Beaches)**

#### **(1) Preamble**

Banks are likely to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to the prevention of pollution, to the protection of fisheries, to wildlife and to aesthetics. Where Banks are composed of concrete, asphalt or other artificial impervious material, said Banks are likely to be significant to flood control, storm damage prevention and to aesthetics.

Banks are areas where ground water discharges to the surface and where, under some circumstances, surface water recharges the groundwater.

Where Banks are partially or totally vegetated, the vegetation serves to maintain the Banks' stability, which in turn protects water quality by reducing erosion and siltation.

Banks may also provide shade that moderates water temperatures, as well as providing breeding habitat, escape cover and food, all of which are significant to the protection of fisheries and to wildlife. Banks which drop off quickly or overhang the water's edge often contain numerous undercuts which are favorite hiding spots for important game species such as largemouth bass (*Micropterus salmoides*) and wildlife.

Banks act to confine floodwaters during the most frequent storms, preventing the spread of water to adjacent land. Because Banks confine water during such storms to an established channel they maintain water temperatures and depths necessary for the protection of fisheries. The maintenance of cool water temperatures during warm weather is critical to the survival of important game species such as brook trout (*Salvelinus fontinalis*) rainbow trout (*Salvelinus gairdneri*) and brown trout (*Salmo Trutta*). An alteration of a Bank that permits water to frequently and consistently spread over a larger and more shallow area increases the amount of property which is routinely flooded, as well as elevating the water temperature and reducing fish habitat within the main channel, particularly during warm weather.

## **(2) Definition, Critical Characteristics and Boundary**

- (a) A Bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland.

A Bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone, or man-made materials such as, but not limited to, concrete or asphalt.

- (b) The physical characteristics of a Bank, as well as its location, as described in the foregoing subsection (2)(a), are critical to the protection of the interests specified in Section 1.33(1) above.
- (c) The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level.

## **(3) Presumption**

Where a proposed activity involves the removing, filling, dredging or altering of a Bank, the Commission shall presume that such area is significant to the interests specified in Section 1.33(1) above. This presumption is rebuttable and may be overcome upon a clear showing that the Bank does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Commission shall make a written determination to this effect, setting forth its grounds (Form 6, Section 1.99).

## **(4) General Performance Standards**

- (a) Where the presumption set forth in Section 1.33(3) above is not overcome, any proposed work on a Bank shall not impair the following:
  - 1. the physical stability of the Bank;
  - 2. the water carrying capacity of the existing channel within the bank;
  - 3. ground water and surface water quality;
  - 4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries and for wildlife.
- (b) Notwithstanding the provisions of Sections 1.33(4)(a) above, structures may be permitted in or on a Bank when required to prevent flood damage to facilities, building and roads constructed prior to the effective date of these regulations or constructed pursuant to a Notice of Intent filed prior to the effective date of these regulations, including the renovation or reconstruction (but not substantial enlargement) of such facilities, buildings and roads, provided that the following requirements are met:
  - 1. the proposed protective structure, renovation or reconstruction is designed and constructed using best practical measures so as to minimize adverse effects on the characteristics and function of the resource area;
  - 2. the applicant demonstrates that there is no reasonable method of protecting, renovating or rebuilding the facility in question other than the one proposed.

### **1.34: *Bordering Vegetated Wetlands (Wet Meadows, Marshes, Swamps and Bogs)***

#### **(1) Preamble**

Bordering Vegetated Wetlands are likely to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution, to the protection of fisheries, to wildlife and to aesthetics.

The plant communities, soils and associates low, flat topography of Bordering Vegetated Wetlands remove or detain sediments, nutrients (such as nitrogen and phosphorus) and toxic substances (such as heavy metal compounds) that occur in run-off and flood waters.

Some nutrients and toxic substances are detained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plants decay in the fall and winter. This latter phenomenon delays the impacts of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.

Bordering Vegetated Wetlands are areas where ground water discharges to the surface and where, under some circumstances, surface water discharges to the ground water.

The profusion of vegetation and the low, flat topography of Bordering Vegetated Wetlands slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage, and by facilitating water removal through evaporation and transpiration. This reduces downstream flood crests and resulting damage to private and public property. During dry periods the water retained in Bordering Vegetated Wetlands is essential to the maintenance of base flow levels in rivers and streams, which in turn is important to the protection of water quality and water supplies.

Wetland vegetation provides shade that moderates water temperatures important to fish life and wildlife. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat and cover for fish and wildlife. Fish populations in the larval stage are particularly dependent upon food provided by over-bank flooding which occurs during peak flow periods (extreme storms), because most river and stream channels do not provide sufficient quantities of the microscopic plant and animal life required. The maintenance of the ecosystem of a Bordering Vegetated Wetlands is necessary for the maintenance of the wildlife populations native to such environments.

Wetland vegetation supports a wide variety of insects, reptiles, amphibians, mammals and birds which are a source of food for important game fish. Blue gills (*Lepomis Macrochirus*), pumpkinseeds (*Lepomis Gibbosus*), yellow perch (*Perca Flavescens*), rock bass (*Ambloplites Rupestris*), and all trout species feed upon nonaquatic insects. Large mouth bass (*Micropterus Psalmodies*), chain pickerel (*Esox Niger*) and northern pike (*Esox Lucius*) feed upon small mammals, snakes, nonaquatic insects, birds and amphibians.

**(2) Definition, Critical Characteristics and Boundary**

- (a) Bordering Vegetated Wetlands are freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. They are areas where the topography is low and flat, and where the soils are annually saturated. The ground and surface water regime and the vegetation community which occur in each type of freshwater wetland are specified in the Bylaw.
- (b) The physical characteristics of Bordering Vegetated Wetlands, as described in the foregoing subsection (2)(a), are critical to the protection of the interests specified in Section 1.34(1) above.
- (c) The boundary of Bordering Vegetated Wetlands is the line within which 50 percent or more of the vegetation community consists of the wetland plant species identified in the Bylaw.

**(3) Presumption**

Where a proposed activity involves the removing, filling, dredging or altering of a Bordering Vegetated Wetland, the Commission shall presume that such area is significant to the interests specified in Section 1.34(1) above. This presumption is rebuttable and may be overcome upon a clear showing that the Bordering Vegetated Wetland does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Commission shall make a written determination to this effect, setting forth its grounds (Form 6, Section 1.99).

**(4) General Performance Standards**

- (a) Where the presumption set forth in Section 1.34(3) above is not overcome, any proposed work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of said area.
- (b) Notwithstanding the provisions of Section 1.34(4)(a) above, the Commission may issue an Order of Conditions permitting work which results in the loss of up to 5000 square feet of Bordering Vegetated Wetland when said area is replaced in accordance with the following general conditions and any additional, specific conditions the Commission deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost:
  - 1. the surface of the replacement area to be created ("the replacement area") shall be at least equal to that of the area that will be lost ("the lost area");
  - 2. the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;
  - 3. the overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;
  - 4. the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;
  - 5. the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;
  - 6. at least 75 percent of the surface of the replacement area shall be reestablished, so as to develop a wetland of the same type as was lost, with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods;

7. the soils in the replacement area shall be of a type and depth which will support the regrowth of the vegetation type which had been indigenous to the wetland type on the lost area as required in the foregoing subsection (b)6 above; and
  8. the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part II of the regulations.
- (c) Notwithstanding the provisions of Section 1.34(4)(a) above, the Commission may issue an Order of Conditions permitting work which results in the loss of a portion of Bordering Vegetated Wetland when;
1. said portion has a surface area less than 500 square feet;
  2. said portion extends in a distinct linear configuration (“finger-like”) into adjacent uplands; and
  3. in the judgment of the Commission it is not reasonable to scale down, redesign or otherwise change the proposed work so that it could be completed without loss of said wetland.

### ***1.35: Land Under Water Bodies and Waterways (under any Creek, River, Stream, Pond or Lake, and Flats)***

#### **(1) Preamble**

Land Under Water Bodies and Waterways is likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution, to the protection of fisheries, to the protection of shellfish, to wildlife and to aesthetics. Where such land is composed of concrete, asphalt or other artificial impervious material, said land is likely to be significant to flood control, storm damage prevention and aesthetics.

Where Land Under Water Bodies and Waterways is composed of pervious material, such land represents a point of exchange between surface and ground water.

The physical nature of Land Under Water Bodies and Waterways is highly variable, ranging from deep organic and fine sedimentary deposits to rocks and bedrock. The organic soils and sediments play an important role in the process of detaining and removing dissolved and particulate nutrients (such as nitrogen and phosphorous) from the surface water above. They also serve as traps for toxic substances (such as heavy metal compounds).

Land under water Bodies and Waterways, in conjunction with banks, serves to confine floodwater within a definite channel during the most frequent storms. Filling within the channel blocks flows which in turn causes backwater and overbank flooding during such storms. An alteration of Land Under Water bodies and Waterways that causes water to frequently spread out over a larger area at a lower depth increases the amount of property which is routinely flooded. Additionally, it results in an elevation of water temperature and a decrease in habitat in the main channel, both of which are detrimental to fisheries, particularly during periods of warm weather and low flows. Such alterations of the habitat of Land Under Water bodies and Waterways will also impact the wildlife populations which utilize them, and under adverse circumstances may foster conditions which detract from the aesthetics of the water body.

Land under rivers, streams and creeks that is composed of gravel allows the circulation of cold, well oxygenated water necessary for the survival of important game fish species such as brook trout (*Salvelinus fontinalis*), rainbow trout (*Salvelinus gairdneri*), brown trout (*Salmo trutta*) and Atlantic salmon (*salmon salar*). River, stream and creek bottoms with a diverse structure composed of gravel, large and small boulders and rock outcrops provides escape cover and resting areas for the above mentioned game fish



species (salmonids). Such bottom type also provides areas for the production of aquatic insects essential to fisheries.

Land under ponds and lakes is vital to a large assortment of warm water fish during spawning periods. Species such as largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), blue gills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), black crappie (*Pomoxis nigromaculatus*) and rock bass (*Ambloplites rupestris*) build nests on the lake and bottom substrates within which they shed and fertilize their eggs.

## **(2) Definition, Critical Characteristics and Boundaries**

- (a) Land Under Water bodies and Waterways is that land beneath any creek, river, stream, pond or lake. Said land may be composed of organic mulch or peat, fine sediments, rocks or bedrock.
- (b) The physical characteristics and location of Land Under Water Bodies and Waterways specified in the foregoing subsection (2)(a) are critical to the protection of the interests specified in Section 1.35 (1) above.
- (c) The boundary of Land Under Water bodies and Waterways is the mean annual low water level.

## **(3) Presumption**

Where a project involves removing, filling dredging or altering of Land Under Water Bodies and Waterways, the Commission shall presume that such area is significant to the interests specified in Section 1.35(1) above. This presumption is rebuttable and may be overcome upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Commission shall make a written determination to this effect, setting forth the grounds (Form 6, Section 1.99).

## **(4) General Performance Standards**

- (a) Where the presumption set forth in Section 1.35(3) above is not overcome, any proposed work within Land Under Water Bodies and Waterways shall not impair the following:
  - 1. The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;
  - 2. Ground and surface water quality;
  - 3. The capacity of said land to provide breeding habitat, escape cover and food for fisheries and wildlife; and
  - 4. the Aesthetic quality of said land in conjunction with the banks.
- (b) Notwithstanding the provisions of Section 1.35 (4) above, the Commission may issue an Order in Accordance with the Bylaw to maintain or improve boat channels within Land Under Water Bodies and Waterways when said work is designed and carried out using the best practical measures so as to minimize diverse effects such as the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms or the destruction of fisheries habitat or nutrient source areas.

### **1.36: Land Subject to flooding (both Bordering and Isolated Areas)**

## **(1) Preamble**

### **(a) Bordering Land Subject to Flooding:**

Bordering land Subject to Flooding is an area which floods from a rise in a bordering waterway or waterbody. Such areas are likely to be significant to flood control, storm damage prevention, aesthetics and wildlife.

Bordering Land Subject to Flooding provides a temporary storage area for flood water which has overtopped the bank of the main channel of a creek, river or stream or the basin of a pond or lake. During periods of peak run-off, flood waters are both retained (i.e., slowly released through evaporation and percolation) and detained (slowly released through surface discharge) by Bordering Land Subject to Flooding. Over time, incremental filling of these areas causes increases in the extent and level of flooding by eliminating flood storage volume or by restricting flows, thereby causing increases in damage to public and private properties. It provides habitat for wildlife and contributes to aesthetic appeal of wetland areas to which it is adjacent.

### **(b) Isolated Land Subject to Flooding:**

Isolated Land Subject to Flooding is an isolated depression or a closed basin which serves as a ponding area for run-off or high ground water which has risen above the ground surface. Such areas are likely to be locally significant to flood control and storm damage prevention. In addition, where such areas are underlain by pervious material they are likely to be significant to public or private water supply and to ground water supply. Where such areas are underlain by pervious material covered by a mat of organic peat and muck, they are also likely to be significant to the prevention of pollution. Finally, such areas offer habitat for wildlife and may contribute to the aesthetic appeal of an area.

Isolated Land Subject to Flooding provides a temporary storage area where run-off and high ground water pond and slowly evaporate or percolate into the substrate. Filling causes lateral displacement of the ponded water onto contiguous properties, which may in turn result in damage to said properties.

Isolated Land Subject to Flooding, where it is underlain by pervious material, provides a point of exchange between ground and surface waters. Contaminants introduced into said area, such as access into the ground water and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area. Said mat serves to detain and remove contaminants which might otherwise enter the ground water and neighboring wells.

## **(2) Definitions, Critical Characteristics and Boundaries**

### **(a) Bordering Land Subject to Flooding:**

1. Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood water rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland.
2. The topography and location of Bordering Land Subject to Flooding specified in the foregoing subsection (2)(a)1 are critical to the protection of the interest specified in Section 1.36(1)(a) above.
3. The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for Dunstable within which the work is

proposed under the National Flood Insurance Program (NFIP, currently administered by the Federal Emergency Management Agency). Said boundary, so determined, shall be presumed accurate. This presumption may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters. Where NFIP Profile data is unavailable, the boundary of Bordering Land Subject to Flooding shall be the maximum lateral extent of flood water which has been observed or recorded. In the event of a conflict, or when lacking any observations or records, the Commission may require the applicant to determine the boundary engineering calculations which shall be:

- a. based upon a design storm of 7 inches of precipitation in 24 hours (i.e. a Type II Rainfall, as defined by the U.S. Soil Conservation Service );
- b. based upon the standard methodologies set forth in U.S. Soil Conservation Service Technical Release No. 55, Urban Hydrology for Small Watersheds and Section 4 of the U.S. Soil Conservation Service, National Engineering Hydrology Handbook and
- c. prepared by a registered professional engineer or other professional competent in such matters.

(b) Isolated Land Subject to Flooding:

1. Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year, on the average, confines standing water to an area of at least 2500 square feet and to an average depth of at least six inches. Isolated Land Subject to Flooding may be underlain by pervious material, which in turn may be covered by a mat of organic peat or muck.
2. The characteristics specified in the foregoing subsection (2)(b)1 are critical to the protection of the interests specified in Section 1.36(1)(b) above.
3. The boundary of Isolated Land Subject to Flooding is the perimeter of the largest observed or recorded volume of water confined in said area.

In the event of a conflict of opinion regarding the extent of water confined in an Isolated Land Subject to Flooding, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations as to the probable extent of said water, said calculations shall be prepared in accordance with the general requirements set forth in items 1-c, Section 1.36 (2)(a)3 above, except that the maximum extent of said water shall be based upon the total volume (rather than peak rate) of run-off from the drainage area contributing to the Isolated Land Subject to Flooding and shall be further based upon the assumption that there is no infiltration of said run-off into the soil within the Isolated Land Subject to Flooding.

**(3) Presumption**

Where a project involves removing, filling, dredging or altering of Land Subject to Flooding (both Bordering and Isolated Areas) the Commission shall presume that such an area is significant to, and only to, the respective interests specified in Section 1.36(1)(a) and (b) above. This presumption may be overcome only upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Commission shall make a written determination to this effect, setting forth its grounds (Form 6, Section 1.99).

**(4) General Performance Standards**

(a) Bordering Land Subject to Flooding

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the Commission said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows. Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall be provided within the same reach of the river, stream or creek.
2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

(b) Isolated Land Subject to Flooding

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Isolated Land Subject to Flooding, when in the judgment of the Commission said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows either adjacent or Isolated Land Subject to Flooding or down stream within Bordering Land Subject to Flooding due to filling which causes displacement of water that would otherwise be confined within said area and which would therefore be either displace laterally, or discharges into Bordering Land Subject to Flooding.
2. A proposed project in Isolated Land Subject to Flooding shall not result in the following:
  - a. Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area.
  - b. An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.
  - c. An adverse effect on the capacity of said area to prevent pollution of the ground water, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
  - d. Destruction of wildlife habitat.
  - e. An adverse effect upon the aesthetic character of the land.

## **1.99 Forms**

### **(1) General Instructions for Completing Forms Applicable to The General Wetlands Bylaw**

The nine forms which are used for the various purposes as specified in these regulations are much similar to a form in the Wetlands Protection Act Regulations (M.G.L. c. 131, s.40) promulgated by the Department of Environmental Quality Engineering of the Commonwealth of Massachusetts and intended to be used for a similar function.

The forms available in the Wetlands Protection Act Regulations of the Department of Environmental Quality Engineering shall be used as the forms for these regulations unless and until forms are drafted which are uniquely applicable to the purposes set forth in these Regulations for the Town of Dunstable General Wetlands Bylaw.

### **(2) List of Forms**

The forms are each identified by number and title below. The number and title of each form to be used for these Regulations is similar to the number and title of the forms to be used for similar purposes under the Massachusetts Wetlands Protection Act Regulations (M.G.L. c.131, s.40)

- Form 1: Request for a Determination of Applicability, Dunstable General Wetlands Bylaw
- Form 2: Determination of Applicability, Dunstable General Wetlands Bylaw
- Form 3: Notice of Intent Under the Dunstable General Wetlands Bylaw
- Form 4: Abbreviated Notice of Intent under the Dunstable General Wetlands Bylaw
- Form 5: Order of Conditions, Dunstable General Wetlands Bylaw
- Form 6: Notification of Non-Significance, Dunstable General Wetlands Bylaw
- Form 7: Extension Permit, Dunstable General Wetlands Bylaw
- Form 8: Certificate of Compliance, Dunstable General Wetlands Bylaw
- Form 9: Enforcement Order, Dunstable General Wetlands Bylaw